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TRANSMITTAL FORM (to be used for all correspondence after initial filing) Total Number of Pages in This Submission: _____	Application Number	10/815,312
	Filing Date	April 1, 2004
	First Named Inventor	Yung-Tin Chen
	Art Unit	1756
	Examiner Name	Stephen D Rosasco
	Attorney Docket Number	MA-117

ENCLOSURES (Check all that apply)		
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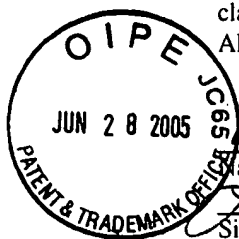
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Yung-Tin Chen	
Application No.: 10/815,312	Group Art Unit: 1756
Filed: April 1, 2004	Examiner: Stephen D. Rosasco
Title: Photomask Features with Chromeless Nonprinting Phase Shifting Window	
Attorney Docket No.: MA-117	

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

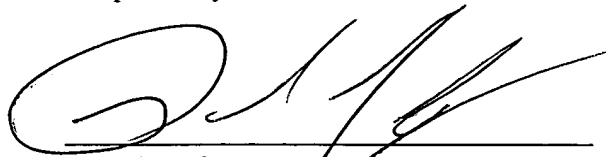
Dear Sir or Madam,

Pursuant to the obligation under 37 CFR § 1.56 and in conformance with 37 CFR §§ 1.97-1.99, Applicant hereby submits documents A1-A37 as listed on the attached form PTO-1449 for consideration by the Examiner. Copies of reference documents A9-A37 are enclosed herewith. Applicant requests that the Examiner review the entire disclosure of these documents and make them of record.

The filing of this Information Disclosure Statement does not constitute an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 CFR §1.56(b). Further Applicant reserves the right to contest that any of the information submitted herewith is prior art against the present application.

Dated: 6/23/05

Respectfully submitted,

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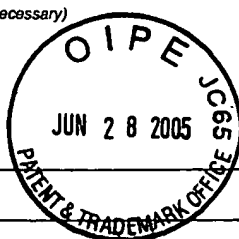
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/815,312
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Group Art Unit	1756
Examiner Name	Rosasco, Stephen

Sheet 1 of 3

Attorney Docket No: MA-117

US PATENT DOCUMENTS

Examiner Initial *	Cite No	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date if Appropriate
	A1	5,240796	08/31/1993	Lee et al.			
	A2	6,057063	05/02/2000	Liebmann et al.			
	A3	6,482555	11/19/2002	Chen et al.			
	A4	6,523165	02/18/2003	Liu et al.			
	A5	6,541165	04/01/2003	Pierrat			
	A6	6,551750	04/22/2003	Pierrat			
	A7	6,569583	05/27/2003	Cho et al.			
	A8	20030022074	01/30/2003	Nolscher			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²
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OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A9	BERNARD, DOUGLAS.A., et al., "Clear Field Dual Alternating Phase Shift Mask Lithography", <u>Optical Microlithography XV</u> , SPIE Vol. 4691, (2002),999-1008	
	A10	BURKHARDT, M., et al., "Through Pitch Correction of Scattering Effects in 193 nm Alternating Phase Shift Masks", <u>Optical Microlithography XV Vol. 4691, No. I, SPIE</u> , (2002),348-358	
	A11	CHA, HAN-SUN., et al., "A Study on Optimization of Alternating Phase Shifting Mask Structure", 21st Annual BACUS Symposium on Photomask Technology, SPIE Vol.4562, No. II, (2002),1008-1016	
	A12	FERGUSON, RICHARD.A., "Pattern-Dependent Correction of Mask Topography Effects for Alternating Phase-Shifting Masks", SPIE Vol. 2440, (2/95),349-360	
	A13	GRIESINGER, UWE., et al., "Balancing of Alternating Phase Shifting Masks for Practical Application: Modeling and Experimental Verification", <u>Proc. of SPIE</u> , Vol. 4186, (2001),372-383	
	A14	GRIESINGER, UWE., et al., "Transmission & Phase Balancing of alternating Phase Shifting Masks (5X)-Theoretical & Experimental Result", <u>19th Annual Symposium on Photomask Technology Vol. 3873, No. I, SPIE</u> , Published in: Monterey, US,(1999),359-369	
	A15	IRIE, SHIGEO., "Sub-70-nm Pattern Fabrication using an Alternating Phase Shifting Mask in 157-nm Lithography", <u>Optical Microlithography XV, SPIE</u> , Vol. 4691, (2002),1654-1664	
	A16	KANG, MYUNG-AH., "Feasibility evaluations of alternating phase shift mask for imaging sub-80nm feature with KrF", <u>Optical Microlithography XVI, SPIE Vol. 5040</u> , (2003),1115-1124	
	A17	KIM, KEEHO., et al., "Optimization of Process Condition to Balance MEF and OPC	

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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

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		for Alternating PSM-Control of Forbidden Pitches", <u>Optical Microlithography XV</u> , Vol. 4691, No.I, SPIE, (2002),240-246	
	A18	KOO, SANG-SOOL.,et al. , "Study on the Potentialities of sub-100nm Optical Lithography of Alternating and Phase-edge Phase Shift Mask for ArF Lithography", <u>20th Annual BACUS Symposium on Photomask Technology</u> , Vol. 4186, SPIE, (2001),346-358	
	A19	KOSTELAK, R.L. ,et al. , "Exposure Characteristics of Alternate Aperture Phase-Shifting Masks Fabricated using a Subtractive Process", <u>J. Vac. Sci. Tech. B</u> , Vol. 10(6), (Nov/Dec 1992),3055-3061	
	A20	LEVENSEN, M.D. ,et al. , "Phase Phirst! An Improved Strong-PSM Paradigm", <u>Proc. os SPIE</u> , Vol. 4186, (2001),395-404	
	A21	LIN, CHIH-CHENG.,et al. , "Alternating PSM defect printability at 193-nm wavelength", <u>21st Annual BACUS Symposium on Photomask Technology Vol. 4562, No.II, SPIE</u> , (2002),1121-1125	
	A22	MAURER, WILHELM.,et al. , "Proximity Effects of Alternating Phase Shift Masks", <u>19th Annual Symposium on Photomask Technology</u> , Vol. 3873, No. I, SPIE, (9/1999),344-349	
	A23	MISAKA, AKIO.,et al. , "Improved outline phase shifting mask for reduction of the mask error enhancement factor", <u>Optical Microlithography XVI, Proceedings of SPIE</u> , Vol. 5040, (2003),1220-1230	
	A24	MURAI, SHIAKI.,et al. , "Establishment of Production Process and Assurance Method for Alternating Phase Shift Masks", <u>20th Annual BACUS Symposium on Photomask Technology, SPIE Vol. 4186</u> , (2001),890-901	
	A25	PETERSEN, JOHN.S. ,et al. , "Designing Dual-Trench Alternating Phase-Shift Masks for 140 NM and Smaller Features Using 248 NM KRF and 193 NM ARF Lithography", <u>Proc. of SPIE</u> , Vol. 3412, (1998),503-520	
	A26	PIERRAT, C., "Investigation of Proximity Effects in Alternating Aperture Phase Shifting Masks", <u>20th Annual BACUS Symposium on Photomask Technology</u> , Vol. 4186, SPIE, (2001),325-335	
	A27	PIERRAT, CHRISTOPHE.,et al. , "New alternating phase-shifting mask conversion methodology using phase conflict resolution", <u>Optical Microlithography XV</u> , Vol. 4691, No. I, SPIE, (2002),325-335	
	A28	SAITOU, HIDETAKA.,et al. , "Improvement of Alt-PSM Production Process Using Backside Phase Measurement Method", <u>21st Annual BACUS Symposium on Photomask Technology Vol. 4562, No. II, SPIE</u> , (2002),1087-1095	
	A29	SHIN, IN-GYUN.,et al. , "A Study on the effect of mask reduction ratio in alternating phase shift masks", <u>20th Annual BACUS Symposium on Photomask Technology</u> , Vol.4186, SPIE, (2001),309-315	
	A30	SPENCE, CHRISTOPHER.,et al. , "Integration of Optical Proximity Correction Strategies in Strong Phase Shifters Design for Poly-Gate Layers", <u>19th Annual Symposium on Photomask Technology</u> , Vol. 3873, No.I SPIE, (9/1999),277-287	

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	A31	TAN, SIA.K. , "Optimization of Alternating PSM Mask Process for 65 nm Poly Gate Patterning Using 193 nm Lithography", <u>Optical Microlithography XVI, SPIE Vol. 5040, (2003), 1125-1136</u>	
	A32	THIELE, JORG., et al. , "Introduction of full level alternating phase shift mask technology into IC manufacturing", <u>Optical Microlithography XV, Vol. 4691, No. I, SPIE, (2002), 89-97</u>	
	A33	TSAL, W., et al. , "Technological Challenges in Implementation of Alternating Phase Shift Mask", <u>20th Annual BACUS Symposium on Photomask Technology, Vol. 4186, SPIE, (2001), 433-443</u>	
	A34	WESTERMAN, R., et al. , "Plasma Etching of Quartz for the Fabrication of Alternating Aperture Phase Shift Photomasks: Etch Rate Uniformity Study", <u>20th Annual BACUS Symposium on Photomask Technology, Vol. 4186, SPIE, (2001), 316-324</u>	
	A35	WU, CLIVE., "Alternating PSM Design and Its Implications to the Design-to-Manufacturing Flow", <u>?, Numerical Technologies, Inc. 70 W. Plumeria Dr., San Jose, CA 95134, 7 pgs</u>	
	A36	YAMAMOTO, TOMOHIKI., et al. , "Impact of Alternating Phase Shift Mask Quality on 100 nm Gate Lithography", <u>20th Annual BACUS Symposium on Photomask Technology, Vol. 4186, SPIE, (2001), 423-432</u>	
	A37	YOON, SI-YEUL., et al. , "Evaluation of various alternating phase shifting mask processes for KrF lithography", <u>21st Annual BACUS Symposium on Photomask Technology Vol. 4562, No. II, SPIE, (2002), 1017-1025</u>	

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